

## ABSTRACT

It is an object to provide a method whereby with respect to a microorganism present in an environment contaminated with  
5 tetrachloroethylene (PCE) and trichloroethylene (TCE), capability of the microorganism to degrade contaminants can be judged promptly.

In order to achieve the above-described object, a biological activity judging method according to the present invention is a method of judging capability of a contaminated environment to eliminate an organochlorine  
10 compound, in which using a DNA probe that allows a bacterium to be detected specifically, which has a degradation activity with respect to the organochlorine compound and/or a dechlorinated product thereof, the bacterium in the environment is detected.

The present invention also provides a new type of polynucleotide that  
15 can be used as a DNA probe in the biological activity judging method according to the present invention.